

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,172	05/19/1999	HIROKI KANNO	016907/0967	4798
75	90 08/19/2004		EXAMI	NER
FOLEY & LARDNER			POKRZYWA, JOSEPH R	
SUITE 500 3000 K STREET N W			ART UNIT	PAPER NUMBER
WASHINGTON, DC 200075109			2622	١
			DATE MAILED: 08/19/2004	$\mathcal{D}$

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summany	09/314,172	KANNO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Joseph R. Pokrzywa	2622				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the d	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed /s will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 03 M	arch 2004.					
	· · · · · · · · · · · · · · · · · · ·					
3) Since this application is in condition for allowar	) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>19-34</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>19-34</u> is/are rejected.	<u> </u>					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Ex		•				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents	s have been received in Application	on No				
3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage				
application from the International Bureau	(PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application (PTO-152)				

Art Unit: 2622

#### **DETAILED ACTION**

### Response to Amendment

1. Applicant's amendment was received on 5/27/04, and has been entered and made of record. Currently, **claims 19-34** are pending.

#### Response to Arguments

2. Applicant's arguments filed 5/27/04 have been fully considered but they are not persuasive.

In response to applicant's arguments regarding the rejection of claim 19, cited in the Office action dated 5/27/04 as being anticipated by Li et al. (U.S. Patent Number 5,506,697), whereby applicant argues on pages 5 and 6 that Li fails to teach of synthesizing first image data (based on reading a document) with second image data, where the second image data is indicative of at least one of operating conditions which determine image quality of the reading means, an image processing means and an image forming means. As seen in column 8, lines 4 through 18, Li teaches that "symbol 45 can be encoded by encoder 44 to also include application data ...[that] may identify particular software used to generate the original document text, such as word processing software or spreadsheet software". Further, as read in column 2, lines 35 through 34, the encoded symbol is used to "produce a printed copy of the original document free of any image degradation occurring during facsimile transmission." Thus, the symbol 45 is indicative of operating conditions which determines the image quality of the image forming means. Currently, claim 19 requires the second image data being indicative of at least one of

Art Unit: 2622

operating conditions which determine image quality of the reading means, the image processing means and the image forming means. Therefore, Li can be interpreted as teaching of synthesizing first image data with second image data, where the second image data is indicative of at least one of operating conditions which determine image quality of the reading means, an image processing means and an image forming means.

Continuing, applicant argues on pages 6 and 7 that Li fails to teach that both the first and second image data are synthesized on the same sheet of paper. The examiner notes that the first image data is interpreted as document text 40a within original document 40, as seen in Fig. 3, and read in column 7, lines 46 through 56. Continuing, as read in column 7, line 66 through column 8, line 3, "the printer 46 reprints the text 40a in conjunction with coded symbol 45 on a clean document sheet. Document 50 thus represents either original document 40 bearing encoded symbol 45 or a reprint of the original document bearing coded symbol 45." Therefore, the coded symbol is synthesized with the original image to create a "reprint of the original document bearing coded symbol 45". Because of this, Li can be interpreted as teaching that both the first and second image data are synthesized on the same sheet of paper.

3. Therefore, the rejection of *claim 19*, as cited in the Office action dated 3/3/04, under 35 U.S.C. 102(b), as being anticipated by Li *et al.*, is maintained and repeated in this Office action.

Application/Control Number: 09/314,172 Page 4

Art Unit: 2622

## Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 19-21, 25, 29, 33, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (U.S. Patent Number 5,506,697, cited in the Office action dated 3/3/04).

Regarding *claim 19*, Li discloses an image forming apparatus (see Figs. 3, 7 and 8, column 7, lines 53 through 56, and column 11, line 41 through column 12, line 2) comprising reading means for reading a document and providing image data on the document as first image data (scanner 42, column 7, lines 48 through 54), image processing means for processing the first image data provided by the reading means (column 7, lines 48 through 61, and column 11, line 41 through column 12, line 34), image forming means for forming an image on a sheet of paper corresponding to input image data (printer 46, column 7, line 56 through column 8, line 3, and column 12, lines 28 through 34), operating condition image producing means for producing image data as second image data (code symbol 45, being produced by the encoder 44, column 7, lines 46 through 56), indicative of at least one of operating conditions which determine image quality of the reading means, the image processing means and the image forming means (column 8, lines 4 through 26, column 9, lines 12 through 42, and column 11, lines 20 through 40), synthesizing means for synthesizing the first image data processed by the image processing means with the second image data produced by the operating condition image producing means (see Fig. 3, coded symbol 45, printed on document 50, column 7, line 56 through column 8, line 3), means for controlling the image forming means to form an image corresponding to the first and second image data synthesized by the synthesizing means on the sheet of paper (see Fig. 3,

Art Unit: 2622

coded symbol 45, printed on document 50, column 7, line 56 through column 8, line 3, and column 12, lines 11 through 20), means for designating whether or not the first image data obtained by the image processing means should be synthesized with the second image data produced by the operating condition image producing means (being the designation of encoded symbol mode, seen as step 172 in Fig. 8, column 12, lines 3 through 28), and the synthesizing means synthesizes the first image data obtained by the image processing means with the second image data produced by the operating condition image producing means and provides resultant synthesized image data in a case where the designating means designates synthesis (step 180, when designated to be in the symbol mode, as "yes" in step 172, column 12, lines 11 through 20), and provides only the first image data obtained by the image processing means in other cases (step 174, column 12, lines 6 through 10).

Regarding *claims 20 and 21*, Li discloses the apparatus discussed in claim 19, and further teaches that the operating condition image producing means includes means for producing a character image data and a pattern code image data indicative of the operating conditions (column 7, line 56 through column 8, line 34).

Regarding *claim 25*, Li discloses the apparatus discussed in claim 19, and further teaches that the operating condition image producing means includes means for producing an image data indicative of processing conditions of the image processing means (column 4, line 62 through column 5, line 12, and column 8, lines 4 through 34).

Regarding *claim 29*, Li discloses the apparatus discussed in claim 20, and further teaches that the operating condition image producing means includes means for producing an image data

Art Unit: 2622

indicative of processing conditions of the image processing means (column 4, line 62 through column 5, line 12, and column 8, lines 4 through 34).

Regarding *claim 33*, Li discloses the apparatus discussed in claim 21, and further teaches that the operating condition image producing means includes means for producing an image data indicative of processing conditions of the image processing means (column 4, line 62 through column 5, line 12, and column 8, lines 4 through 34).

Regarding *claim 34*, Li discloses the apparatus discussed in claim 21, and further teaches that the image corresponding to the second image data is user readable (column 6, lines 41 through 59).

## Claim Rejections - 35 USC § 103

- 6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 7. Claims 22-24, 26-28, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li *et al.* (U.S. Patent Number 5,506,697, cited in the Office action dated 3/3/04) in view of Antognini *et al.* (U.S. Patent Number 6,176,427, cited in the Office action dated 3/3/04).

Regarding *claims 22, 26, and 30*, Li discloses the apparatus discussed in claims 19, 20, and 21, respectively, but fails to expressly disclose if the operating condition image processing means includes means for producing an image data indicative of input conditions of the reading means.

Application/Control Number: 09/314,172 Page 7

Art Unit: 2622

Antognini discloses an image forming apparatus (see Fig. 24) comprising reading means for reading a document and providing image data on the document as first image data (being inherent in a facsimile machine, column 22, line 47 through column 23, line 7, column 47, lines 28 through 45, and column 48, lines 1 through 28), image processing means for processing the first image data provided by the reading means (steps 2401 and 2402, column 47, lines 28 through 38), image forming means for forming an image on a sheet of paper corresponding to input image data (printed onto a substrate at step 2404, whereby a printer is inherently in a facsimile machine), operating condition image producing means for producing image data as second image data (digitally encoded substrate, see Figs. 1 and 2), indicative of at least one of operating conditions which determine image quality of the reading means, the image processing means and the image forming means (see Fig. 2, column 19, lines 3 through 26, column 20, lines 15 through 57, and column 24, line 59 through column 25, line 14), synthesizing means for synthesizing the first image data processed by the image processing means with the second image data produced by the operating condition image producing means (see Fig. 9, column 22, line 47 through column 23, line 7, and step 2404, column 47, lines 28 through 62), means for controlling the image forming means to form an image corresponding to the first and second image data synthesized by the synthesizing means on the sheet of paper (step 2404 in Fig. 24, column 47, lines 28 through 62). Further, Antognini teaches that the operating condition image producing means includes means for producing an image data indicative of input conditions of the reading means (column 19, lines 3 through 26).

Li & Antognini are combinable because they are from the same field of endeavor, being systems that encode data on substates.

Art Unit: 2622

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further include a means for producing an image data indicative of input conditions of the reading means, as taught by Antognini, in the system of Li.

The suggestion/motivation for doing so would have been that Li's system would become more efficient, as Li's system would include the ability to determine the optimum printer/scanner combination for the desired output, as recognized by Antognini in column 1, lines 41 through 58, and column 4, lines 49 through 62.

Therefore, it would have been obvious to combine Antognini's teachings with the system of Li to obtain the invention as specified in claims 22, 26, and 30.

Regarding *claims 23, 27, and 31*, Li discloses the apparatus discussed in claims 19, 20, 21, respectively, but fails to particularly teach if the operating condition image processing means includes means for producing an image data indicative of a resolution and sampling rate of the reading means.

Antognini discloses an image forming apparatus (see Fig. 24) comprising reading means for reading a document and providing image data on the document as first image data (being inherent in a facsimile machine, column 22, line 47 through column 23, line 7, column 47, lines 28 through 45, and column 48, lines 1 through 28), image processing means for processing the first image data provided by the reading means (steps 2401 and 2402, column 47, lines 28 through 38), image forming means for forming an image on a sheet of paper corresponding to input image data (printed onto a substrate at step 2404, whereby a printer is inherently in a facsimile machine), operating condition image producing means for producing image data as second image data (digitally encoded substrate, see Figs. 1 and 2), indicative of at least one of

Art Unit: 2622

operating conditions which determine image quality of the reading means, the image processing means and the image forming means (see Fig. 2, column 19, lines 3 through 26, column 20, lines 15 through 57, and column 24, line 59 through column 25, line 14), synthesizing means for synthesizing the first image data processed by the image processing means with the second image data produced by the operating condition image producing means (see Fig. 9, column 22, line 47 through column 23, line 7, and step 2404, column 47, lines 28 through 62), means for controlling the image forming means to form an image corresponding to the first and second image data synthesized by the synthesizing means on the sheet of paper (step 2404 in Fig. 24, column 47, lines 28 through 62). Further, Antognini teaches that the operating condition image processing means includes means for producing an image data indicative of a resolution (column 19, lines 3 through 26, column 20, lines 15 through 57, and column 24, line 59 through column 25, line 14) and sampling rate of the reading means (column 15, line 18 through column 16, line 16).

Li & Antognini are combinable because they are from the same field of endeavor, being systems that encode data on substates.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further include a means for producing an image data indicative of a resolution and sampling rate of the reading means, as taught by Antognini, in the system of Li.

The suggestion/motivation for doing so would have been that Li's system would become more efficient, as Li's system would include the ability to determine the optimum printer/scanner combination for the desired output, as recognized by Antognini in column 1, lines 41 through 58, and column 4, lines 49 through 62.

Art Unit: 2622

Therefore, it would have been obvious to combine Antognini's teachings with the system of Li to obtain the invention as specified in claims 23, 27, and 31.

Regarding *claims 24, 28, and 32*, Li discloses the apparatus discussed in claims 19, 20, and 21, respectively, but fails to specifically teach if the operating condition image processing means includes means for producing an image data indicative of output conditions of the image forming means.

Antognini discloses an image forming apparatus (see Fig. 24) comprising reading means for reading a document and providing image data on the document as first image data (being inherent in a facsimile machine, column 22, line 47 through column 23, line 7, column 47, lines 28 through 45, and column 48, lines 1 through 28), image processing means for processing the first image data provided by the reading means (steps 2401 and 2402, column 47, lines 28 through 38), image forming means for forming an image on a sheet of paper corresponding to input image data (printed onto a substrate at step 2404, whereby a printer is inherently in a facsimile machine), operating condition image producing means for producing image data as second image data (digitally encoded substrate, see Figs. 1 and 2), indicative of at least one of operating conditions which determine image quality of the reading means, the image processing means and the image forming means (see Fig. 2, column 19, lines 3 through 26, column 20, lines 15 through 57, and column 24, line 59 through column 25, line 14), synthesizing means for synthesizing the first image data processed by the image processing means with the second image data produced by the operating condition image producing means (see Fig. 9, column 22, line 47 through column 23, line 7, and step 2404, column 47, lines 28 through 62), means for controlling the image forming means to form an image corresponding to the first and second

Art Unit: 2622

image data synthesized by the synthesizing means on the sheet of paper (step 2404 in Fig. 24, column 47, lines 28 through 62). Further, Antognini teaches that the operating condition image producing means includes means for producing an image data indicative of output conditions of the image forming means (column 10, lines 34 through 46, and column 19, lines 3 through 26).

Li & Antognini are combinable because they are from the same field of endeavor, being systems that encode data on substates.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further include operating condition image producing means includes means for producing an image data indicative of output conditions of the image forming means, as taught by Antognini, in the system of Li.

The suggestion/motivation for doing so would have been that Li's system would become more efficient, as Li's system would include the ability to determine the optimum printer/scanner combination for the desired output, as recognized by Antognini in column 1, lines 41 through 58, and column 4, lines 49 through 62.

Therefore, it would have been obvious to combine Antognini's teachings with the system of Li to obtain the invention as specified in claims 24, 28, and 32.

#### Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

oseph R. Pokrzywa

Examiner Art Unit 2622